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CASE NO. 8944			
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24.10.03

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Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°
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nmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
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COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☐ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☒ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 1A

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 25 2215

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 4 434 830 A (EGAN WILLIAM E ET AL) 6 March 1984 (1984-03-06) * column 1, line 36-68 * * column 9, line 17-61 * * figures 5,6 *	1-3,6-9	B64C25/36
Y		4	
X	US 1 969 088 A (MARANVILLE ALGER G) 7 August 1934 (1934-08-07) * page 3, line 75-78 * * page 4, line 16-31 * * page 5, line 45-53 * * figure 1 *	1,2,6-9	
Y	DE 43 01 778 A (OPEL ADAM AG) 28 July 1994 (1994-07-28) * column 1, line 9-17 * * column 2, line 54-67 * * column 3, line 5-29 * * figure 1 *	4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B64C B60B B60C
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 8 October 2003	
		Examiner Weber, C	

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons
& : member of the same patent family, corresponding document

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 25 2215

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-10-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 4434830	A	06-03-1984	CA	1210312 A1	26-08-1986
			DE	3475053 D1	15-12-1988
			EP	0119149 A2	19-09-1984
			JP	59164204 A	17-09-1984
US 1969088	A	07-08-1934	BE	394887 A	
			FR	751946 A	12-09-1933
			GB	410923 A	31-05-1934
DE 4301778	A	28-07-1994	DE	4301778 A1	28-07-1994



This application is covered by the extended European search report pilot project at present running within the European Patent Office, applied to all European patent applications filed as first filing and searched on or after 01.07.03. Under this project the EPO issues together with the search report an opinion on whether the application and the invention to which it relates meet the requirements of the EPC. This non-binding opinion is issued free of charge as a service. This opinion may be used as the basis for an informed decision as to whether it is desired to pursue the application further or not.

For further details of this pilot project, the applicant's attention is directed to the Official Journal edition 5/2003. If any further immediate questions or comments arise the EPO Customer Services: +31-70-340 4500 or +49-89-2399 2828 can be contacted.

The attached opinion reveals that the application or the invention to which it relates appear not to meet the requirements of the Convention (see comments on enclosed Form 2906).

If the applicant wishes to continue with this application the examination fee must be paid. Where appropriate amendments can be filed to address the objections raised in the opinion, thus shortening the overall procedure. If no amendments are filed, the opinion will be re-issued as the first official communication under Article 96(2) and Rule 51(2) EPC.

If the examination fee has already been paid and the right to the communication under Article 96(1) EPC has been waived for this application, the first official communication under Article 96(2) and Rule 51(2) EPC will be issued promptly.



The examination is being carried out on the **following application documents**:

Text for the Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR LI

Description, pages:

1-12 as originally filed

Claims, No.:

1-10 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: US-A-4 434 830 (Landers et al., Mar. 6, 1984)

D2: US-A-1 969 088 (Maranville, Aug. 7, 1934)

D3: DE-A-43 01 778 (Opel AG, Jul. 28, 1994)

1. Clarity

The term "smoothly" in claim 1 at line 10 is a relative term and renders the claim unclear in the sense of Article 84 EPC. In particular, this term is essential with regard to the invention and therefore, cannot be allowed (see also the Guidelines C-III, 4.5). This term should be replaced by technical features clearly defining the invention.

2. Novelty

Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-



matter of claim 1 is not new in the sense of Article 54(1) and (2) EPC, and therefore the requirements of Article 52(1) EPC are not met.

Document D1 discloses a wheel for aircraft having in combination all features of claim 1:

- a wheel (40) having a rim (44) around which there is mounted a tyre (42),
- wherein the region at the junction between the tyre and the rim is shaped such that on at least one side of the wheel, during use of the landing gear on an aircraft when airborne and the landing gear is in a position ready for landing of the aircraft, the surface of said region interfaces smoothly with the surfaces, presented to the airflow, of both the tyre and the wheel (figs. 5 and 6).

Though the subject-matter of claim 1, i.e. a landing gear, is not explicitly disclosed in document D1, it is directly and unambiguously derivable from that document. Disclosing that the wheel is for use on aircraft (col. 1, lines 36 to 68) the claimed landing gear, without any particular technical features specified, can be directly derived by the skilled person and is therefore implicitly disclosed in document D1.

Note that also document D2 takes away the novelty of the subject-matter of claim 1.

3. Regarding the dependent claims

- 3.1 The additional feature of dependent claim 2 is disclosed in document D1 (figs. 5 and 6). Therefore, claim 2 is not new.
- 3.2 The additional feature of dependent claim 3 is disclosed in document D1 (fig. 6). Therefore, claim 3 is not new.
- 3.3 The feature of dependent claim 4, i.e. a sealing element which bridges a gap between the wheel rim and the tyre, is disclosed in document D1 (wheel cover 58). The technical feature that the element is made from an elastically deformable elastomeric material is disclosed in document D3 (col. 2, lines 54-57) which shows



a wheel cover (fig. 1) to reduce noise of wheels at high speed. According to D3 the advantage of the elastically deformable elastomeric material is that the cover is always tightly in contact with the wheel also for larger wheel deformations (col. 2, lines 54-60). This would lead the skilled person to use the elastomeric material also for the wheel cover disclosed in document D1. Therefore, claim 4 does not involve an inventive step.

However, including technical features in claim 1 that specify that an elastically deformable elastomeric sealing element is deposited into the gap between the wheel rim and the tyre might presumably render the subject-matter of claim 1 new and inventive in the sense of Article 54(1) and (2) and Article 56 EPC, respectively.

- 3.4 The additional feature of dependent claim 5 is not disclosed in its present form in any of the documents cited in the search report. Including this feature in independent claim 1 might presumably render the subject-matter of claim 1 new and inventive in the sense of Article 54(1) and (2) and Article 56 EPC, respectively.
- 3.5 The additional feature of dependent claim 6 is disclosed in document D1 (fig. 5). Therefore, claim 6 is not new.
- 3.6 The additional feature of dependent claim 7 is disclosed in document D1 (fig. 5). Therefore, claim 7 is not new.
- 3.7 The additional feature of dependent claim 8 is disclosed in document D1 (fig. 6). Therefore, claim 8 is not new.
- 3.8 The additional feature of dependent claim 9 is disclosed in document D1 (fig. 6). Therefore, claim 9 is not new.
- 3.9 The additional feature of dependent claim 10 is not disclosed in its present form in any of the documents cited in the search report. Including this feature in independent claim 1 might presumably render the subject-matter of claim 1 new and inventive in the sense of Article 54(1) and (2) and Article 56 EPC,



respectively.

4. Formal requirements

- 4.1 Independent claim 1 is not in the two-part form in accordance with Rule 29(1) EPC, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 29(1)(a) EPC) and with the remaining features being included in the characterising part (Rule 29(1)(b) EPC).

Independent claim 1 should therefore be redrafted accordingly. If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefor should be provided in the letter of reply. In addition, the applicant should ensure that it is clear from the description which features of the subject-matter of claim 1 are already known in combination from the document D1 (see the Guidelines, C-III, 2.3b).

- 4.2 To meet the requirements of Rule 27(1)(b) EPC, the document D1 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.
- 4.3 The vague and imprecise statement in the description on page 12 at lines 3 to 5 implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity of the claims (Article 84 EPC) when used to interpret them (see the Guidelines, C-III, 4.3a). This statement should therefore be amended to remove this inconsistency.